Remarks

Claims 141-152 and 163-194 are pending in the Application.

Claims 175, 184, 185, 193 and 194 are withdrawn from consideration.

Claims 141-152, 163-174, 176-183, and 186-192 are rejected.

Claims 175, 184, 185, 193 and 194 are cancelled herein without prejudice.

I. REJECTIONS UNDER OBVIOUSNESS-TYPE DOUBLE PATENTING

Examiner has rejected Claims 141-152, 163-174, 176-183, and 186-192 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 6,790,425, "Macroscopic Ordered Assembly of Carbon Nanotubes." ("the '425 Patent"). Office Action, at 2. Examiner contends that "although the conflicting claims are not identical, they are not patentably distinct from each other because they [claim a] common subject matter – given that SWNTs self-assemble." *Id.* Applicant traverses this rejection.

As an initial matter, Applicants note that the present Application is a divisional application filed under Rule 53(b) (37 C.F.R. § 1.53(b)) of co-pending United States Patent Application Serial No. 09/380,545, filed September 3, 1999, which is the 35 U.S.C. § 371 national application of International Application Number PCT/US98/04513, filed March 6, 1998 ("the 04513 PCT Application"). Accordingly, the claims of the present Application have an effective date of at least March 6, 1998.[1]

The '425 Patent is also owned by the Applicant of the present Application. The '425 Patent issued from United States Patent Application Serial No. 09/890,030, which is the 35 U.S.C. § 371 national application of International Application No. PCT/US00/29722, filed Oct. 27, 2000, and which further claims priority to United States Provisional Patent Application Serial No. 60/161,717, filed Oct. 27, 1999. Accordingly, the claims of the '425 Patent have an effective filing date of October 27, 1999.

[1] The Application further claims benefit of six provisional patent applications, which support even earlier effective filing dates for the claims.

This means the '425 Patent issued from the later filed application. Moreover, the inventions disclosed in the present Application are prior art for the '425 Patent. Applicant notes that the 04513 PCT Patent Application is referred to and incorporated by reference in the '425 Patent. (*See* '425 Patent, col. 2, *ll.* 43-65). Double patenting is only applied when neither inventions of the patent and the patent application are prior art against the other (which is usually because the patent and patent application have a common priority date). *See General Foods Corp. v. Studiengesellschaft Kohle mbH*, 972 F.2d 1272, 1278-81, 23 U.S.P.Q.2d 1839, 1843-46 (Fed. Cir. 1992); *see also Eli Lilly and Co. v. Barr Laboratories Inc.*, 251 F.3d 955,58 U.S.P.Q.2d 1865, 1866 (Fed. Cir. 2001) (Newman, J., dissenting from the refusal to reconsider the case *en banc*). Accordingly, the double patenting rejection is simply inappropriate.

Furthermore, even if it were appropriate to assert obviousness-type double patenting, the Examiner has not established a *prima facie* case of obviousness. This is because, under the present circumstance, the Examiner must apply a "two-way test." M.P.E.P. § 804, paragraph II.B. Under the two-way test, the Examiner must apply the *Graham* obviousness analysis twice. *Id.*, paragraph II.B.(b). The first time, the application claims are investigated to determine whether each claim is an obvious variant of an invention claimed in the patent. *Id.* The second time, the patent claims are investigated to determine whether each claim is an obvious variant of an invention claimed in the patent application. *Id.* "Where a two-way obviousness determination is required, an obvious-type double-patenting rejection is appropriate only where each analysis compels a conclusion that the invention defined in the claims in issue is an obvious variation of the invention defined in a claim in the other application/patent. If either analysis does not compel a conclusion of obviousness, no double patenting rejection of the obvious-type is made." *Id.*

The independent claims of the '425 Patent state:

> 1. A macroscopic assembly of single-wall carbon nanotubes consisting essentially of substantially aligned single-wall carbon nanotubes, wherein the single-wall carbon nanotubes comprise derivatized single-wall carbon nanotubes

selected from the group consisting of end-derivatized single-wall carbon nanotubes, side-derivatized single-wall carbon nanotubes, and combinations thereof.

12. A macroscopic assembly comprising a plurality of substantially aligned single-wall carbon nanotubes, wherein the macroscopic assembly is in the form of a membrane, and wherein the single-wall carbon nanotubes in said membrane are parallel to the plane of the membrane.

13. A macroscopic assembly comprising a plurality of substantially aligned single-wall carbon nanotubes, wherein at least some of the plurality of substantially aligned single-wall carbon nanotubes are derivatized single-wall carbon nanotubes and wherein said derivatized single-wall carbon nanotubes are selected from the group consisting of end-derivatized single-wall carbon nanotubes, side-derivatized single-wall carbon nanotubes, and combinations thereof.

14. A composite material comprising single-wall carbon nanotubes and solid matrix material, wherein (a) the single-wall carbon nanotubes are substantially aligned (b) at least some of the aligned single-wall carbon nanotubes are within the solid matrix material and (c) the single-wall carbon nanotubes comprise derivatized single-wall carbon nanotubes selected from the group consisting of end-derivatized single-wall carbon nanotubes, side-derivatized single-wall carbon nanotubes, and combinations thereof.

17. A composite material comprising substantially aligned single-wall carbon nanotubes and solid matrix material, wherein at least some of the substantially aligned single-wall carbon nanotubes are within the solid matrix material and the single-wall carbon nanotubes are derivatized single-wall carbon nanotubes selected from the group consisting of end-derivatized single-wall carbon nanotubes, side-derivatized single-wall carbon nanotubes, and combinations thereof.

18. An probe microscope that comprises a tip of the probe microscope, wherein the tip comprises a material assembled by field-alignment of a macroscopic amount of single-wall carbon nanotubes.

19. A macroscopic assembly comprising a macroscopic amount of substantially aligned single-wall carbon nanotubes, wherein (a) the macroscopic assembly is in a form of a membrane (b) the membrane is at least 1 micron thick, and (c), the single-wall carbon nanotubes in said membrane are parallel to the plane of the membrane.

A comparison between each of these independent Claims of the '425 Patent and Claims 141-152, 163-174, 176-183, and 186-192 of the present Application reveals that each of Claims 1-19 of the '425 patent comprise elements that are not in the claims of the present Application. In view of these additional elements, the Claims of the '425 patent are not obvious variations of the invention claimed in the present Application. Thus, for this and for the other factors under the *Graham* obviousness analysis, each of Claims 1-19 of the '425 patent cannot be an obvious variant of an invention claimed in the present Application. Accordingly, Examiner's double-patent rejection is again inappropriate.

Applicant further notes the granting of the present Application does not violate the public policy upon which non-statutory double-patenting was judicially created, namely to prevent the unjustified or improper extension of the right to exclude granted by a patent.

Therefore, in view of the foregoing, Applicant respectfully requests that the Examiner withdraw his rejection of Claims 141-152, 163-174, 176-183, and 186-192 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-19 of the '425 Patent.

II. CONCLUSION

As a result of the foregoing, Applicant asserts that the Claims in the Application are now in a condition for allowance, and respectfully requests allowance of such Claims.

Applicant respectfully requests that the Examiner call Applicant's attorney at the below listed number if the Examiner believes that such a discussion would be helpful in resolving any remaining problems.

Respectfully submitted,

WINSTEAD SECHREST &
MINICK P.C.
Attorneys for Applicant

By: _____
Ross Spencer Garsson
Reg. No. 38,150

P.O. Box 50784
Dallas, Texas 75201
(512) 370-2870